

MINUTES

Tuesday, November 13, 2018

**East Bay Municipal Utility District
Board of Directors
375 Eleventh Street
Oakland, California**

Special Meeting

Vice President Patterson called to order the Special Meeting of the Board of Directors at 9:05 a.m. in the Training Resource Center. The Board met in workshop session to receive an update on Long-Term Infrastructure Investments.

ROLL CALL

Directors John A. Coleman, Doug Linney, Frank Mellon, Marguerite Young, and Vice President William B. Patterson were present at roll call. Director Andy Katz arrived at 9:15 a.m. President Lesa R. McIntosh was absent (excused).

Staff present included General Manager Alexander R. Coate, General Counsel Craig S. Spencer, Director of Engineering and Construction Xavier J. Irias, Director of Operations and Maintenance Clifford C. Chan, Director of Wastewater Eileen M. White, Manager of Maintenance and Construction Michael R. Ambrose, Manager of Water Operations David A. Briggs, Engineering Manager Serge V. Terentieff, Engineering Manager David J. Rehnstrom, Special Assistant to the General Manager Douglas I. Wallace, and Secretary of the District Rischa S. Cole.

PUBLIC COMMENT

- Addressing the Board was Eric Larsen, 1st Vice President, AFSCME Local 444, who commented on Local 444's support of staff's proposals to hire two pipeline crews and additional staff to decrease District use of contracted sawcutting, paving and flagging services. Mr. Larsen also commented on staffing levels at the District's Main Wastewater Treatment Plant.

DISCUSSION

- Filed with the Board was a presentation entitled "Long-Term Infrastructure Investment," dated November 13, 2018.

General Manager Alexander R. Coate announced that the workshop will build on information presented to the Board during committee meetings, budget workshops and the October 16, 2018 infrastructure tour. He explained that the workshop will cover three key sections - master plans and studies, maintenance, and the District's Capital Improvement Program.

Director of Engineering and Construction Xavier J. Irias introduced the workshop agenda, explained its purpose and how the topics align with the District's Strategic Plan goals. In addition to providing information, staff is also seeking Board input on upcoming Fiscal Year (FY) 2020/2021 Capital Improvement Program priorities.

Engineering Manager David J. Rehnstrom discussed the three main drivers – the Mission Statement, the Strategic Plan and District policies – for the District’s master plans and studies for the Water System and the four basic categories of master plans and studies – water demand studies, treatment and transmission master plans, distribution studies, and water supply master plans. He described the drivers for the Capital Improvement Program (CIP) and how departments use master plans and studies to prioritize the District’s 5-year CIP. Although water demand is not a driver of the CIP, the District conducts a comprehensive update of its water demand study every 10 years. The 2040 study was completed in 2009 and the 2050 study is expected to be final by the end of 2019. Multiple studies regarding treatment and transmission have been completed at the District’s six water treatment plants. Additional studies are planned to fine-tune future use of the plants. In regards to distribution, he discussed the innovative approaches used by Pipeline Rebuild and the need to conduct long-term logistic support studies to address space and capacity requirements for additional pipeline staff, equipment staging and trench soils. In conclusion, he talked about dam safety and noted the dam emergency action plan and Federal Energy Regulatory Commission 12D safety inspection report have been completed and that work is underway to update inundation maps and spillway assessments.

Director of Wastewater Eileen M. White provided an overview of issues facing the Wastewater System and the master planning effort underway to address the Main Wastewater Treatment Plant’s (MWWTP) aging infrastructure, water quality and environmental regulatory requirements, the need to eliminate discharges to wet weather facilities to comply with the District’s Consent Decree by 2036, and emerging concerns regarding biosolids management and nutrient discharges. She also said as part of the master planning efforts, staff will be looking at the impacts of climate change, sea level rise, more intense storms, and the load coming into the plant as a result of prolonged droughts. She discussed the work in progress to comply with the Consent Decree including the status of the District’s Private Sewer Lateral program and the Pump Station Q project in Berkeley. During wet weather seasons, the District diverts most of its biosolids to the landfill for alternative daily cover. With the passage of SB 1383 and its requirements to reduce the amount of biosolids being diverted to landfills, staff is working with other Bay Area publicly owned treatment works to find alternative solutions for biosolids. The District is working with scientists, regulators and other stakeholders and providing funding for studies to address nutrient discharges to the San Francisco Bay. Ms. White explained the District accounts for approximately 19 percent of the total nutrient discharge to the Bay and that nutrient upgrades at the MWWTP could cost \$2.4 billion and totally change operations at the plant. Next, she reviewed the process used to develop the master plan which when complete, will deliver a roadmap to cost-effectively provide reliable wastewater services, optimize use of existing infrastructure, prioritize CIP investments to make no-regret infrastructure investments, meet increasingly stringent regulatory requirements, accommodate potential growth, and achieve environmental sustainability.

Director of Operations and Maintenance Clifford C. Chan introduced the information to be reviewed under Strategy 2 – Effective Maintenance. He said three project categories – pipelines, open-cut reservoirs, and treatment plants – represent approximately 43 percent of the District’s two-year capital budget and of those three categories pipeline is the largest. Next, he reviewed the District’s pipeline inventory, its water loss strategy, main break data, and methods being used to address water loss and main breaks. He reviewed examples and explained apparent losses (paper losses) versus real losses (leaks in the system).

Manager of Maintenance and Construction Michael R. Ambrose provided more detail on methods used to address apparent and real losses. The District currently replaces approximately 20,500 customer meters per year. Industry standards state that meters over 20 years old are past their useful life and should be replaced. To mitigate apparent losses, the District will increase annual meter replacements to

25,000 per year; increase the number of small and medium sized meters tested annually; test all large meters every two years; and replace vaults, flow meters and taps on effluent flow meters at water treatment plants. To address real losses the District monitors system leaks, manages pressure to decrease main breaks, and performs pipeline replacements. The leak detection program uses acoustic loggers and satellite leak detection. In FY18, over 1,200 miles of pipe was surveyed primarily by satellite. The program will be expanded in the next few years by deploying additional acoustic loggers and piloting technology using airplanes instead of satellite to survey for leaks. To manage pressure and minimize transients, the District will install more pressure monitors, install more pressure management systems on regulators, and continue monitoring district metered areas. Finally, Mr. Ambrose reviewed pipeline replacement goals and efforts and discussed targeted main replacements. In FY19, the District replaced 15 miles of pipe with plans to replace 20 miles in FY20. To increase pipeline replacement rates additional pipeline crews, support staff, a possible increase in the use of fully maintained and operated services, and expanded yard and storage space will be needed. Staff is also exploring alternatives for trench soils recycling and reuse, looking at developing Oakport for additional yard and storage space, and new space options for the Central Area Service Center.

Manager of Water Operations David A. Briggs provided an overview of the operational drivers for corrosion control, transmission improvements, distribution improvements, water quality and water treatment, and operational continuity in light of Pacific Gas and Electric's (PG&E) de-energization plans. The District has two transmission improvement projects in the proposed capital plan to improve corrosion control, increase reliability, and prevent unplanned outages in the Mokelumne and Lafayette aqueducts. He discussed planned improvements for the overall disinfection process with a primary focus on the Orinda Water Treatment Plant; plans to more reliably treat and maintain the quality of the various source delivered to treatment plants (i.e. Pardee, Freeport, water transfers); plans to reduce taste and odor causing compounds; staff engagement in regulatory processes to ensure the District remains informed and prepared to address future regulations that could potentially impact operations; planned pretreatment processes that will help the District operate as climate change impacts the variability in water quality; work the District is doing with upcountry partners to proactively protect water quality through forest management; and steps being taken to reduce water age which will in turn lower disinfection byproducts and nitrification rates while achieving a higher disinfectant residual. In conclusion, he discussed PG&E's de-energization plans. The District has reviewed its processes, inventoried its mobile generators and pumps, assessed future equipment needs, and developed plans to address facilities that are de-energized by PG&E on short or no notice. He explained that staff is actively working with PG&E to ensure the District receives notice in advance before facilities are de-energized and is actively engaged with other impacted utilities on this issue.

Engineering Manager Serge V. Terentieff presented an overview of the District's Capital Improvement Program (CIP). He discussed how CIP priorities are informed by master plans, studies and operations and maintenance, and are prioritized according to safety, reliability, and water quality while factoring in regulatory compliance and cost-effectiveness. He highlighted recent accomplishments and upcoming projects in the CIP for the raw water, treatment plants, reservoirs, pumping plants, and pipeline asset classes. These improvements will address the issues previously outlined by Mr. Briggs. The District is working to address drought and resiliency by adding pretreatment processes at the Walnut Creek water treatment plant which will allow for greater operational flexibility and reliability. Mr. Terentieff concluded with an overview of the MacArthur-Davenport large diameter pipeline project and highlighted upcoming work for the distribution system. Director of Wastewater Eileen M. White highlighted FY18/19 wastewater CIP accomplishments, reviewed the FY20-24 wastewater CIP outlook, planned investments for the MWWTP and how the forthcoming MWWTP master plan will inform future capital investments.

Director of Engineering and Construction Xavier J. Irias concluded with a discussion of how community engagement, information technology and a macroeconomic climate are overarching issues that impact the District's infrastructure improvements. He noted that an update to the District's CIP is in process and costs will remain in line with the previously projected rates. The updated CIP will be presented to the Board in March 2019.

Board Discussion


There was considerable Board discussion and staff responded to questions regarding the information presented. The Board thanked staff for their efforts and requested the following:

- Background paper on nutrients in the San Francisco Bay
- Status of biosolids use for wetlands restoration in Emeryville and which entities are opposed to the project
- Larger copies of the graphs on presentation slides 30 and 40
- Explanation of the District's approach for evaluating soils for contaminants
- Update at a future Planning Committee meeting that explains the District's approach for reaching out to cities to coordinate construction activities and documents efforts and successes
- Update on PG&E's de-energization plans and potential District liability and mitigation measures
- Information on long-term plans including expansion logistics for Pipe Rebuild during the March 2019 workshop
- Explanation of grant and state revolving fund loan efforts during the March 2019 workshop
- Status of the District's automated meter infrastructure pilot project
- Consider composting toilets as part of the MWWTP master planning process
- Continue including infrastructure investment and maintenance information in public outreach materials

ADJOURNMENT

Vice President Patterson adjourned the Special Meeting at 11:20 a.m.

SUBMITTED BY:



Rischa S. Cole, Secretary of the District

APPROVED: November 27, 2018



Lesla R. McIntosh, President of the Board